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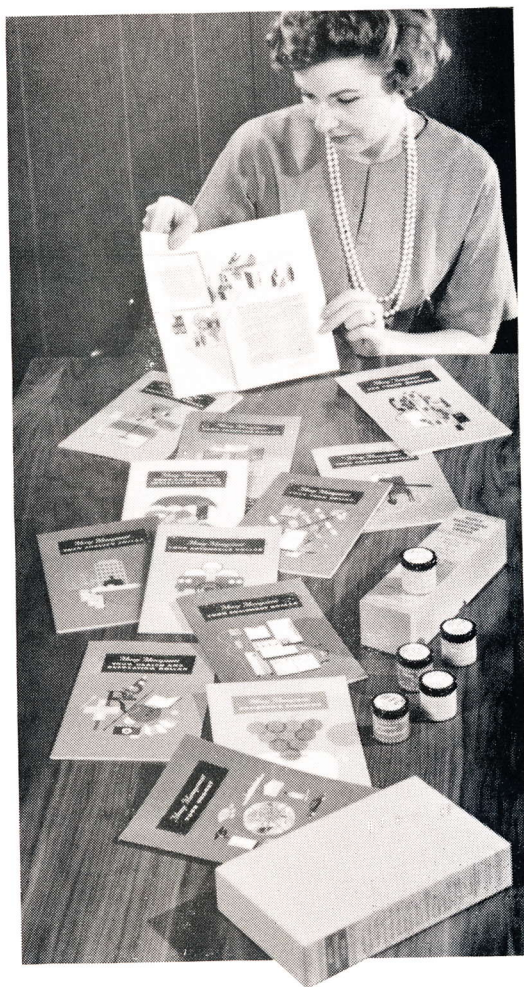
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25th Anniversary Year

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ARTICLES

A STUDY OF FOOD-USE BY GRADE NINE
STUDENTS IN METROPOLITAN TORONTO..... 119

NUTRITION TODAY
George H. Beaton and Heather Milne 127

MEMORIAL TO MRS. WILLIAM ANDREW AMOS.. 143

DEPARTMENTS

WHO'S WHO IN CANADIAN HOME ECONOMICS.. 125

NEWS FROM CANADA'S CAPITAL 126

FROM THE EDITOR 139

PROVINCIAL NEWS 140

COLLEGE CLUBS 143

ABSTRACTS OF CURRENT LITERATURE 144

BOOK REVIEWS 146

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A Message from the President . . .

The days pass so quickly. It seems like yesterday that we met in Winnipeg to celebrate our Silver Jubilee. As I write this we are in that short dreary time between the beautiful autumn colors and the first soft snowfall. For some it is a sad time, for others it is a time to plan for the days ahead, and for still others it is an impatient time, a time when it is hard to wait for Mother Nature to change our world into a winter wonderland.

While driving home not long ago and wondering what I could say to all of you, two ever changing pictures came into my mind. In one I saw our new graduates as the Spring, young, alive and eager to start growing. Summer seemed to be a larger group, but a divided group. Some were homemakers busy with their families, some were in responsible positions but had not yet reached the top of their profession, and others were combining homemaking with a career. The bright colours and the crisp weather of the Fall suggested the leaders, those who have reached the top and hold out helping hands to others. Then Winter, not the blustery days, but those lovely quiet mornings when one wakes to find the ground covered with a light powdery snow. Here our senior members were looking back on jobs well done, ready to assist if needed, and now with time to do the things they have always dreamed of doing.

My other picture was one of CHEA. Spring was our birthday twenty years ago, and as Summer follows Spring, so my picture changed. Summer was the time we grew in wisdom and stature. Fall arrived with its excitement, its exhilaration and its riot of color. Fall was our Silver Jubilee Year. This was the year that we launched our Silver Jubilee Scholarship Drive. I could look into the future, into the Winter, and I could see a few people starting to roll a small snowball along the ground. It grew, and as it did, the group was joined by people of all ages, coming from all directions, who wished to give it the needed shove to keep it growing. My picture faded in the distance, but I like to think of our snowball rolling along and gathering momentum as it goes.

This is something that may affect any one of us, for in the years ahead, someone very near and dear to us may receive one of our scholarships. In another twenty-five years it could be the daughter of one of this year's graduates, whose mother is in the Spring group today.

And now my wish for all of you, wherever you may be, is much happiness in the holiday season and in 1965.

Norah M. Holcomb.

A Study of Food-Use by Grade Nine Students in Metropolitan Toronto^{1, 2}

JILL M. ARMSTRONG, M.A.³; JOSEPHINE L. PECKHAM, B.A.⁴;
ELIZABETH STEEN TEMPLETON, B.Sc.⁵; ANN MATTHEWS
BODLEY, M.A.⁶, and BARBARA A. MCLAREN, Ph.D.⁷

Introduction

Dietary studies, assessing nutritive quality, have been carried out with a number of different population groups. A detailed quantitative record of all foods consumed by an individual over a given period was the type of measurement most widely used. The ideal length of time for keeping a food record has always been subject to controversy. The longer period is frequently associated with lessened interest and lack of co-operation on the part of the subjects; the shorter period is thought to provide more accuracy, especially with larger groups of subjects (1). Recently in the United Kingdom, Marr et al (6) compared individual weekly dietary records of weighed foods eaten, with general food-use information secured by a questionnaire. Good correlation between the two types of studies. In another study in the United States, Chalmers et al (4) reported, that on the average, as far as accuracy was concerned, it was immaterial which day of the week was chosen for dietary study as long as it was not on the weekend.

With these ideas in mind, the Toronto Nutrition Committee planned to conduct a survey which would help its members in their work of teaching Nutrition in schools, health and welfare organizations and various adult groups. In general, therefore, its main intent was to provide local nutrition information for the guidance of public health nurses and teachers of Home Economics, Physical Education or Science. Grade IX

students in Toronto Secondary Schools were proposed as subjects for the investigation and in order to disturb their regular routine as little as possible it was decided to carry out a general food-use survey instead of a detailed dietary record. A sub-committee designed a list of questions related to several different branches of health education, which would supply information regarding the regular habitual use of various foods. It was agreed that, though these data would not be specific enough to establish the actual nutritional status of the Grade IX students, they might at least give a valuable indication of the daily meal pattern of the average adolescent.

Experimental Method

(a) Selection of Sample.

About 8,000 Grade IX students in thirty-one schools, including public, separate and private institutions located in the Toronto area, were selected to fill out the questionnaire. Obtaining the data in this way was made possible through the co-operation of the Toronto Board of Education, the Metropolitan Toronto Separate School Board and eight private schools.

(b) Time and Duration of the Survey.

Earlier studies on Grade VI (1952) and Grade VIII (1956) students had been carried out by the committee on a single day in February. Therefore in order that any seasonal effect would be eliminated in comparing results, the present study was again conducted on a Wednesday in February, 1962.

(c) Questionnaire

The questionnaire was designed so that the data could be tabulated on punch cards for electronic processing, and in order to separate the data for each sex, green paper was used for the boys and yellow for the

1. Carried out under the auspices of the Toronto Nutrition Committee.

2. This study was supported, in part, by a grant from the University of Toronto, Household Science Alumnae Research Fund.

3. Ryerson Polytechnical Institute.

4. Toronto Board of Education.

5. Toronto Department of Public Health.

6. Milk Foundation of Toronto.

7. Faculty of Food Sciences, University of Toronto.

girls. They answered the thirty-seven questions by checking the category which indicated their regular daily or weekly intake of the essential foods recommended in Canada's Food Guide, as well as some non-essential dessert and snack items. A question on the daily use of a pharmaceutical supplement containing vitamin D was included because of its role in bone formation, and also because in the northern hemisphere a person is not exposed to the sun's rays to the same extent in winter as in summer. The name of the supplement was requested so that the Committee could determine whether in fact, it contained vitamin D or not, and the answer to this question was interpreted before processing.

There was also a question of four parts which it was hoped would give some idea of student activity in the required school physical education programme. Measurement of individual participation in intramural and community team play and in such sports as swimming and skating was of special interest, not only because of the possibility of correlation between food-use and physical activity, but also because of the fact that in Toronto schools, health classes are taught by staff members of the physical education department.

Another section of the questionnaire contained questions which would indicate whether a student brought his lunch or purchased his noon meal in the cafeteria. Answers also established how many students ate breakfast regularly. The students who did not eat this meal, recorded their reasons for its omission.

In setting up the questionnaire, an attempt was made to determine the different levels of intake of specific foods. For example in the case of milk, an essential food, a student could check 0, 1, 2, 3, 4 or more glasses per day. Three or more servings per day was arbitrarily chosen to be a reasonable daily intake and so was classified as satisfactory; less than three: a fair intake. Similarly, in the case of soft drinks listed among the snack foods, more than two bottles per week was considered excessive; intake of less than two bottles was recorded as limited. It should be noted that these categories were only a guide to measurement for this study, and not an endorsement of intake!

When the results of the study had been tabulated, the raw data indicating general percentage intakes in each food grouping were supplied to the participating schools so that the principals, the teachers of Health, Home Economics and Physical Education, and the school nurses could compare their students' performance with the overall city average. Correlation matrices were run for each of the questions on essential and snack foods.

Results and Discussion

In Table I data on the regular use of foods which would be found in a satisfactory meal pattern, are presented for all students who completed a questionnaire.

It should be noted that if a student met the criteria for each food requirement and for vitamin D as set forth in this plan he would be assured of an adequate supply of all the essential nutrients and calories required for his optimum growth and development. When these data were analysed, some interesting results were seen. Similar reports from both Canada and the United States have shown previously that well above 90 per cent of the students concerned ate one or more servings of meat per day. In the present, however, only 58 per cent of the students ate meat as often as this. Such a discrepancy might be explained by the fact that many of the earlier studies were based on a one-day recall method or on a one-week food record, while the present questionnaire aimed at a record of habitual food-use. It should be noted also that this inquiry was designed to determine dinner meats rather than meats used in sandwiches, snacks or in combination dishes, as in the earlier questionnaires. A similar explanation might apply to the lower intake of vegetables (raw and cooked), citrus fruits and juices found in the present study. The frequency of drinking milk appeared to be higher in this study than in previous surveys, but it should be pointed out that no attempt was made to determine the size of the glass used. Moreover, the criterion for "satisfactory intake" was lower than previously suggested. It is evident that bread (83 per cent), ice cream (77 per cent) and pudding (73 per cent) enjoyed the greatest acceptance of all the foods listed. Now that most flour is enriched and en-

TABLE I
PERCENTAGE OF GRADE NINE STUDENTS WHO REPORTED
A SATISFACTORY INTAKE OF ESSENTIAL FOODS,
AND EXCESSIVE INTAKES OF SNACK FOODS

	FOOD	CRITERIA	Percent of Students
ESSENTIAL FOODS	Milk	3 or more glasses per day	62
	Fruit and Vegetable Juice	3 or more servings per day	35
	Citrus Fruits	1 or more servings per day	30
	Other Fruits	1 or more servings per day	30
	Potatoes	1 or more servings per day	47
	Vegetables Raw	1 or more servings per day	20
	Vegetables Cooked	2 or more servings per day	16
	Meat	1 or more servings per day	58
	Eggs	2 or more servings per week	70
	Cheese	2 or more servings per week	50
	Liver	1 or more servings per week	15
	Dried Peas, Beans	1 or more servings per week	49
	Cereal	1 or more servings per day	31
	Bread	2 or more slices per day	83
	Vitamin D Supplement	400 International Units per day	31
SNACK FOODS	Ice Cream	Not more than 4 servings per week	77
	Puddings	Not more than 4 servings per week	73
	Soft Drinks	more than 2 bottles per week	46
	Tea, Coffee	more than 1 serving per day	37
	Pasteries	more than 1 serving per day	61
	Potato Chips and Fries	more than 4 servings per week	65
	Nuts	more than 2 servings per week	52
	Popcorn	more than 2 servings per week	47
	Candy	more than 2 servings per week	38
	Chocolate Bars	more than 2 servings per week	47

riched bread is made with non-fat milk powder, two slices of bread per day can contribute four grams of protein and significant amounts of thiamine, niacin, riboflavin and iron which are valuable for growing boys and girls. Many present-day educators are concerned about the high calories in ice cream and puddings but others argue that ice cream and even some puddings are basically foods with significant amounts of protein, calcium and riboflavin and if eaten by active children, the extra calories will be used for energy. Because of the contribution of valuable nutriment which these foods make to an adequate food intake, it is doubtless reasonable to approve a moderate consumption of these foods for this age group.

Direct correlation between the intake of soft drinks and other foods eaten, appeared to be higher with the snack foods than with those foods appearing in Canada's Food Guide. However, when the same

correlation procedure was used with milk, higher values were found with those foods forming a normal meal pattern than with the snack foods. Again, however, it should be pointed out that these correlation values were too low to be valuable in assigning significance to the relationships. They are mentioned only to note the connection between the new categories of essential and non-essential foods.

In Table II the participation of boys and girls in physical and health education programs is expressed in percentages.

Table II

When the activities of girls and boys participating on school teams were measured in percentages, it was apparent that in the commercial, technical and secondary schools, the sexes followed a similar pattern. But, in the separate schools the girls (20 per cent) had a considerably greater number taking part than the boys (14 per

TABLE II
PARTICIPATION OF BOYS AND GIRLS IN PHYSICAL AND HEALTH EDUCATION EXPRESSED IN PERCENTAGES

Type of School	Total	Excused %	No. of School Teams				No. of Intramural Teams			No. of Community Teams			No. of Other Activities			
			1 %	2 %	3+ %	3+* %	1 %	2 %	3+ %	1 %	2 %	3+ %	1 %	2 %	3 %	4 %
Commercial and Technical	G 1626	4	22	8	2		19	9	3	15	8	6	15	25	28	22
	B 1903	3	23	7	3		24	8	3	24	12	11	19	23	23	26
Secondary	G 1235	3	21	11	3		25	27	7	17	7	4	16	27	27	24
	B 1777	2	23	8	4		34	7	3	23	12	9	14	21	19	23
Separate	G 379	4	36	20	2		20	16	2	18	11	6	17	28	26	24
	B 375	3	27	10	4		38	17	6	32	10	6	20	25	25	20
Private	G 269	8	65	23	17		62	42	18	62	20	9	26	49	66	50
	B 173	0	29	9	16		31	17	25	26	9	6	12	23	22	38
Public School Commercial Classes	G 299	21†	10	2	4		9	1	1	10	8	5	14	25	21	24
	B 34	9	15	3	6		3	9		18	15	15	21	15	24	15

* + More than 3 teams.

† Two of the five Public School Commercial Classes had no facilities for physical and health education programmes at the time of this survey.

cent). This same relationship seems to hold for the private schools. However, in the latter there were about 30 per cent more girls than boys in attendance. The data seemed to substantiate the same pattern in the intramural and community teams. But, in other activities the participation was approximately the same (25 per cent) in all the schools except with girls in the private schools. They recorded almost 50 per cent participation which is double that of the other schools.

Table III

In general, answers to the breakfast question indicated that 27 per cent of the students did not eat at all in the morning. The most common excuse stated was lack of time (10.8 per cent) and the other reasons fell in the following order: "disliked breakfast foods" (4.1 per cent), "meal not prepared for me" (2.8 per cent), breakfast makes me ill" (0.4 per cent) and "no appetite" (0.7 per cent). Although these percentages are relatively small, when applied to over 8,000 students they implicated more than 2,100 of the children.

The results of a survey of this type must be considered in relation to the limitations which are inherent in each step of the pro-

gramme. There are possibilities for ambiguity in any such questionnaire: (a) misinterpretation of the questions by the student; (b) incompatibility of the criteria for a certain food intake with the way a given person lives; (c) performance of the student answering the test; (d) errors in the transfer of data from the test sheet to a "punched" card and (e) discrepancies in the interpretation of the data by members of the committee. Therefore, it should be emphasized that the results of this survey indicate only the general food-use pattern of specific foods for Grade IX students and nothing more. For example, the data show how many students ate eggs in their daily menu but they do not include the amount of egg that was incorporated into other food products such as baked goods. The advantage of a survey of this type over the one-day method is that it helps to give a more complete picture of the food-habits of the teenager. Since boys and girls are under great stress both mentally and physically, it is imperative that they should be guided into food habits which will insure an adequate intake of all the essential nutrients. The aim in teaching nutrition is therefore to form proper eating habits as early as possible. If educators could impress upon

TABLE III
REASONS GIVEN BY STUDENTS FOR SKIPPING BREAKFAST

School	Total Number	No Time	Dislike Foods	Not Prepared	Makes Ill	No Appetite	Other
		%	%	%	%	%	%
Commercial and Technical	G 1626	8	7	.5	.2	0	.3
	B 1903	4	5	.2	.3	0	.5
Secondary	G 1235	5	4	.4	.03	.3	.3
	B 1777	4	4	.1	.2	.2	.4
Separate	G 379	8	5	0	0	.1	.4
	B 375	2	3	.4	0	0	0
Private	G 269	6	2	1	0	0	5
	B 173	1	1	0	.2	0	.2
Public School Commercial Classes	G 299	19	10	24	3	3	9
	B 34	6	0	0	0	3	3

their students the value of buoyant health which provides increased resistance to many diseases they would undoubtedly be assured of brighter, more enthusiastic classes motivated to desire the most from life. For instance, the data concerning snack foods might be used to advantage as a teaching device. The importance of eating foods which contain complete protein, vitamins and minerals before the extra foods which provide mainly empty calories, could be stressed more than it is at present. And aside from the nutritional inadequacy of snack foods, the dental implication is important. A well-known Swedish study with adults has publicized widely the effect of between-meal, sweet snacks on the incidence of dental caries, for the number of cavities developed by subjects who indulged in sweet snacks was so impressive that the experiment was not even carried to completion. As a result of this report many dentists have tried to discourage between-meal eating entirely. However, the possibility of completely eliminating the snack habit of either teenagers or adults appears quite remote. A more positive approach would probably be (a) to develop foods which would fulfil the requirements of a snack and yet not contain excessive amounts of sugar and other cariogenic foods, and (b) to teach people both old and young, that high quality fresh fruits, raw vegetables and various cheeses make very satisfying between-meal foods. If the advertising agencies and food industries were to direct some of their sales promotion to selling either or all of these foods in small snack-size packages, there would be no need of trying to eliminate the snack habit which in any case is obviously here to stay.

Summary and Conclusion

A survey based on Canada's Food Guide was carried out on approximately 8,000 Grade IX students in the Toronto area to determine the pattern of food-use, the participation in physical and health programs and the prevalence of missing breakfast. In general there was a wide variation in the food eaten by teenagers. The regular intake of milk showed an increase over the results of a dietary survey of Grade VIII students in 1956. The use of citrus fruits and vegetables apparently decreased and the number reporting an in-

take of one or more servings of meat per day changed from 96 per cent to 58 per cent over the last six years. This was doubtless due to the fact that the questionnaire was designed to record only dinner meats rather than meat used in sandwiches, snacks, or in combination dishes.

Data in the Physical Education section of the questionnaire revealed that girls and boys participated approximately equally in school, intramural and community team programmes and other activities. A greater number of students participated in one activity rather than in two or more. Data for those who did not eat breakfast indicated that more than one-fifth of the students did not eat before going to school each day. Lack of time was given as the main reason for this omission.

It is obvious from this study that the present techniques of nutrition education are not adequate to meet the needs of the teenage group.

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The essence of any civilization is found in its sense of values, demonstrated in its preferences, its moral commitments, its aesthetic judgments, its loyalties, its conception of the good life, its standards of excellence, its measures of success, and what it teaches its young people about the things for which men shall live.

Who's Who in Canadian Home Economics

Edith B. Bradbrooke, B.Sc. (H.Ec.)

Born in Yorkton, Saskatchewan, Edith Bradbrooke received her elementary and secondary education in the schools of that city; she was graduated from Manitoba University with the degree of Bachelor of Science in Home Economics, and took Teacher Training in Regina, Sask.



Miss Bradbrooke has been a dedicated teacher all her professional life. She taught at first in rural elementary schools in Saskatchewan, and in Yorkton. She taught high school Home Economics in Regina, Sask. (Central Collegiate) for 4 years; for the past 33 years she was on the staff of the Saskatoon Technical-Vocational Collegiate. Miss Bradbrooke retired the end of June, 1964.

Professional and other organizations have engaged a good part of Miss Bradbrooke's attention. She has been on the executive of the Saskatoon Home Economics Association, and has served as Treasurer, and as President of that Association; she has also been on the executive of the Saskatoon Quota Club, and in that Club also has served as Treasurer and as President. She is a member of the University Women's Club of Saskatoon; of the Canadian Institute of International Affairs; and of the Canadian Home Economics Association. At the July 1964 Canadian Home Economics Association's Convention, Miss Bradbrooke was named Chairman of the Membership Committee for the 1964-66 term of office.

Travel is one of the interests of our new Membership Chairman . . . she has made a world cruise via freighter; and also toured Europe. A more stay-at-home diversion is duplicate bridge.

*The Silver Jubilee Scholarship Drive
has received over \$4,000 to date.*

Margaret Pugh, B.Sc. (H.Ec.), R.D.

Margaret Pugh was born in Winnipeg, Man. She attended Rupert's Land School for Girls from grade one through grade eleven, then registered in the Home Economics course of the Faculty of Agriculture and Home Economics of the University of Manitoba. She was graduated with the degree of Bachelor of Science in Home Economics. She interned as a dietitian at the Royal Victoria Hospital, Montreal, and is a registered dietitian.



Miss Pugh served one term with the Dominion-Provincial Youth Training Program, at Killarney, Man., spent a year as a dietitian on the staff of Grace Hospital, Winnipeg; was on the dietetic staff of the Winnipeg Children's Hospital; and then went to Deer Lodge Hospital, with Canada's Department of Veteran's Affairs, where she is now Assistant Director of Dietary Services.

The number, and variety of the organizations of which Miss Pugh is a member is an indication of the breadth of her interests. She is a life member of the Canadian Dietetic Association, and has served as the association's Secretary; as Chairman of the Vocational Guidance Committee, of the Legislative Committee, and of the Arrangements Committee for the 1964 Convention. She is presently a Manitoba Director of C.D.A. She is a member of the Dietetic Association of Manitoba, and has spent a total of 7 years on that executive, in the offices of Arrangements Committee Chairman, Secretary, and President. She is presently Chairman of the Education Committee of the Dietetic Association of Manitoba, and a member of the Canadian Dietetic Association's Education Committee.

Miss Pugh is a member of the Canadian Home Economics Association. She was a member of the Program Committee for the 1964 Convention, and is now a Manitoba

(Please turn to page 138)

News from Canada's Capital

RCAF Food Services Branch

W/C Agnes L. Campbell, Director of Food Services for the RCAF has been appointed to head the integrated Food Services Section at Canadian Forces Headquarters, Ottawa.

F/O Jean Liberty was promoted to Flight Lieutenant rank in March and appointed Officer Commanding the School of Food Services at RCAF Station Clinton, Ont.

F/L Nancy Galbraith who is responsible for flight feeding services in the RCAF was promoted to the rank of Squadron Leader in May, 1964.

Transfers:

S/L Betty Bell who has been Officer Commanding the School of Food Services for the past five years was transferred to Air Division Headquarters, Metz, France to take over the duties of Staff Officer Food Services for the Air Division.

F/L Elaine Forbes has been transferred from Station Winnipeg to the Food Services section of Air Defence Command Headquarters at St. Hubert, Que.

F/O Giselle Poulin formerly of RCAF Station North Bay, Ontario, has been transferred to Dietetic Services at the National Defence Medical Centre, Ottawa.

F/O Caron Gummesson completed the RCAF dietetic internship (combined T. Eaton Company Ltd. and DVA) in July and was transferred to Station Winnipeg.

F/O Judy Chester completed the RCAF sponsored internship at the Royal Victoria Hospital in Montreal in May and was transferred to Station Downsview.

F/O Diane Reid completed the RCAF sponsored internship at the Royal Victoria Hospital in Montreal in July and was transferred to the staff of the School of Food Services at Station Clinton.

Internships:

F/O Denise Leblanc, a graduate of Montreal University and the Army COTC Food Services training plan commenced RCAF sponsored internship training at the Vancouver General Hospital in June.

F/O Normand Lebeau and F/O Gabriel Frechette, graduates from Montreal University, commenced the RCAF sponsored internship at the T. Eaton Company Ltd., Toronto, in August.

F/O Helen Foster, a graduate of Mount Allison University and the RCAF Food Services University Reserve Training Plan commenced the RCAF sponsored internship at the Victoria General Hospital, Halifax in September.

Consumer Branch, Department of Fisheries:

There have been several changes in the staff of Consumer Branch of the Department of Fisheries. Miss Suzanne Beaulieu left the Department in Ottawa in July to take a position in Quebec. Mrs. Louise Dumont Rankin left the Department at the end of September to become a full time homemaker. Miss Marie Anderson joined the Department in June as regional Home Economist for the Prairies. Miss Dorothy Doyle joined the Department in Ottawa temporarily for one year. Miss Lise Laneville joined the Department in Ottawa in September.

Consumer Section, Canada Department of Agriculture:

Several appointments have been made this year to the staff of the Consumer Section. Mrs. Barbara Jarvis is now writing the monthly press releases and recording items for radio. She was formerly with the Nutrition Division, Department of Health and Welfare where she wrote and edited "Nutrition Notes." She is a graduate of MacDonald College, McGill University and took her internship at the Colorado Medical Center, University of Colorado, Denver. Moving to Toronto she was dietitian in the New Mount Sinai Hospital and was later a research home economist with Griffiths' Laboratories, Toronto.

Judith Strang is now doing television films and radio tapes which the Section provides as a monthly service to Women commentators. She received her undergraduate training at the University of Ottawa and took the

(Please turn to page 138)

CANADIAN HOME ECONOMICS JOURNAL

NUTRITION TODAY

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Introduction

"Nutrition" implies the study of the effect of food intake and food utilization on the health of the individual. "Malnutrition" is any departure from an optimal state of health which can be attributed, in part at least, to a faulty intake or utilization of food. It is important to realize that the departure may be on the side of excess or deficiency. Thus, obesity, like scurvy or rickets, should be considered a form of malnutrition — and in North America, the most important form.

However, a consideration of "nutrition" cannot be restricted to discussion of foods alone. There are many factors influencing the availability, selection and utilization of foods which must also be included. Some of these factors are depicted in Figure I. The result is a highly complicated, closely interrelated network that ultimately determines the nutritional status of the individual.

It is not my intent to discuss all of these factors but I will attempt to point out the influence of certain factors. While you are undoubtedly more closely interested in North America, it is vital that you and all Canadians see the implications of "Nutrition Today" in the developing countries. Food supplies and food needs have always played an important role in the shaping of history. They will continue to play an extremely important, perhaps critical, role in the future. It is only with a background of diversified knowledge that we can truly understand and appreciate the nature of "Nutrition Today."

Many of the discussions will rest on considerations of food availability — at the national, regional, and local basis. While this is an extremely important consideration, it is recognized that the true determinant of nutritional status is food utilization

at the individual level. Thus, we may find acute deficiency diseases among certain individuals in a land of plenty, such as Canada, and extremely well nourished individuals in countries suffering gross food shortage. Not only must the total amount of food be adequate to feed the population, but the individuals within the population must be taught to use the available food wisely.

This viewpoint has been summarized in the preface to *Malnutrition and Food Habits*⁽¹⁾: "There is already enough scientific knowledge to bring about considerable improvement in the nutritional status of children in many parts of the world, if it could be widely applied. This knowledge cannot, however, be used where it is needed unless the people themselves want to use, know how to do so, and are prepared to accept the changes necessary for its effective use. Unfortunately, there appear to be psychological, sociological, and cultural factors which create barriers against rapid change in food habits, and which are less well understood than the impersonal aspects of nutrition and malnutrition."

Nutrition Today in Developing Countries

The many factors affecting the availability of foods may be placed in the four major groupings: (a) Production, preservation and transportation; (b) Population to be fed; (c) Acquired food preferences; and (d) Economic availability to the individual. Table I provides data on the estimated food availability in several areas of the world as of 1959; this information was collected by the Food and Agriculture Organization (FAO)⁽²⁾.

(a) **Production, Preservation and Transportation.** The disparity between the developing and the developed countries is

TABLE 1
ESTIMATED PER CAPUT AVAILABILITY OF FOOD
IN VARIOUS PARTS OF THE WORLD
1957-59

Region	Calories	Protein (Gm.)	
		Total	Animal
Far East (including China)	2060	56	8
Near East	2470	76	14
Africa	2360	61	11
Latin America (excluding Argentina, Uruguay)	2430	63	19
Argentina and Uruguay	3040	96	55
Europe (including U.S.S.R.)	3040	88	36
North America	3110	93	66
Oceania	3250	94	62
World	2420	68	20

readily apparent. The quantity of food available may be judged by the figures for calories; the quality of food available may be judged by the figures for protein and more particularly for the animal protein. It is of interest to note that in the developing regions cited, excepting the Far East, the available calories approximate the estimated requirements for those regions. In the developed countries, the available calories exceed estimated requirements. However, this does not mean that all individuals will have adequate calories available. The data would also suggest that in the future, more attention will be directed to improving the quality of foods available; simply increasing the world production of cereals and starchy foods will not be adequate.

Many of the factors depicted in Figure I as affecting food production are not subject to change. With our present capabilities, little can be done about the normal climate, the topography, and the nature of the soil of a country. On the other hand, water supplies, a serious limitation to agricultural production in many areas, can be improved by advanced technology⁽³⁾. Difficulties in geographic isolation can be overcome. Agricultural methods, fertilizers, plant varieties, animal husbandry methods and livestock quality are all subject to

change⁽⁴⁾. Considerable education and capital expenditure will be necessary to effect these changes and the rate of progress is likely to be slow. Increased use of fish products from the ocean may supplement food supplies of some countries *if* fishing fleets and processing plants are available and *if* fish can be introduced to a cereal-eating population. Food exports from the developed countries may help to alleviate immediate problems on a short-term basis but they are not a long-term solution. The developed countries cannot economically afford to provide food at a sufficiently low price to make it available; the developing countries cannot politically afford to be dependent on "relief" programs. Furthermore as was shown in Table I, the availability of food on a world basis is currently inadequate for the maintenance of good health; no amount of redistribution can solve this.

(b) **Population.** Obviously, food production can only be judged against the population it must support. The data in Table I were expressed in terms of per capita food supplies. Although current food availability is below minimal standards in many areas, the real problem lies in the competition between increased food production and increased population expansion. Can even

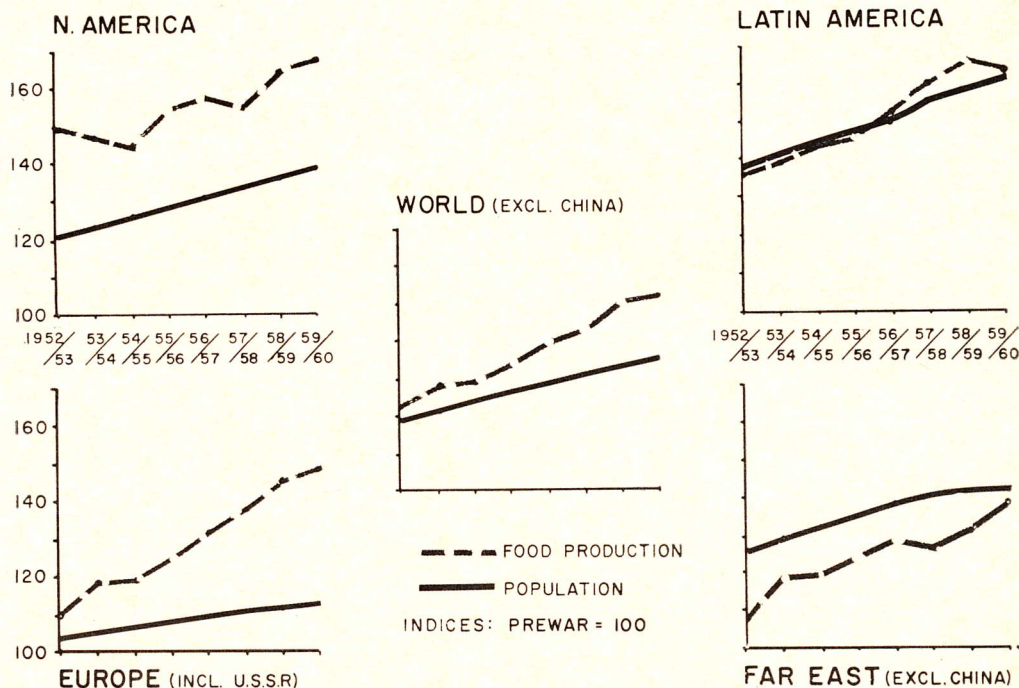


Figure II. THE RACE BETWEEN FOOD AND POPULATION. Food production has increased slightly more than population since the prewar period in all but a few countries. However, in many countries the existing food production is still below minimal standards of adequate nutrition; the increase has not been sufficient to provide any marked improvement in nutrition conditions since the prewar period. It is estimated that by the year 2000, population will double and food production will have to increase almost threefold to meet nutritional standards.

Food production will have to increase almost threefold. However, because existing levels of intake are not equal in all countries and because existing rates of population increase are not uniform, food supplies will have to increase fourfold in Asia and the Far East, between three and fourfold in Latin America, three fold in the Near East and between two and threefold in Africa.

We must realize that the population increase is not due to an increased birth-rate; it is due to a decreased death rate. It is due in large part to the provision of medical care, public health programs, and in a more limited sense, to the provision of food itself. Fewer infants and children die today than ten years ago. Natural

disasters are countered by the provision of food, medical supplies, and other services; widespread epidemics are seldom seen today or are stopped in their infancy.

Even the most optimistic of us have doubts about our ability to increase food production rapidly enough to keep pace with population. Morally, we cannot allow existing lives to be lost by refusing to fight pestilence, disease and disaster. Morally, we do not have the right, on a world basis, to bring children into a life of hunger, illiteracy and unemployment. At stake is not only the food situation but the whole educational and economic structure of the countries.

As the families living in these areas realize that they no longer need to bear 10 chil-

dren to have 4 or 5 live, they will voluntarily choose to limit the size of their families. At this point we have the moral obligation to provide them with the knowledge, and the means, of spacing their children.

A combination of increased food production and decreased birthrate can meet the future demands for food and provide an increased per capita food availability^(4, 5). Alone, it is doubtful that either could even maintain the status quo.

(c) **Food Preferences.** Improvement of the food balance in a country will not guarantee adequate nutrition of all of the people, but it will place this goal within reach. As was pointed out in the quotation cited earlier⁽¹⁾ there still remains the major problem of re-education of the people. They must learn the basic facts about suitable food selection. Most important of all they must want to learn the facts.

The local beliefs and traditions about foods must be understood and combatted if necessary. Food has always had certain mystical properties, such as the ability to influence personality; also, curative powers are frequently attributed to foods. In many cultures, a young child is not given meat because everyone knows that it causes worms. In many areas milk (except breast milk) is not thought to be a suitable food for humans. Frequently the treatment of infantile diarrheas is with starch water — a form of semi-starvation that may lead to acute malnutrition. These are typical of some of the beliefs and traditions that influence food selection⁽⁶⁾.

(d) **Economic Availability.** An extremely

important underlying problem is that of providing sufficient income to the family to purchase adequate amounts of food. The effect of income can be seen in Table II⁽²⁾. It is apparent that with very low incomes, the availability of money is a major factor; it is less important at income levels prevailing in countries such as the United States, except in large families as will be discussed later.

An equitable and nutritionally sound distribution of food within the family must also be achieved. Frequently, and admittedly logically, food distribution is based on the economic value of the individual within the family, i.e., men have first consideration, then the older boys, the mother, the older girls, and the children. If sufficient food is available there is no problem; in food shortages, the young children may suffer the greatest deprivation.

The situation in the world is far from hopeless. Tremendous strides in agriculture are being made; birthrates will fall as they have at such periods in the past⁽⁷⁾; education will improve; economic growth will take place. However, these changes will take time; they cannot improve as dramatically as the death rate has fallen. Immediate steps are needed to curb the rate of population increase so that it will not cancel these improvements; family planning is obviously important. Continued technical aid and educational scholarships from the developed countries are essential.

Nutrition in Canada

The situation in developing countries is of world interest for both humane and political reasons. Interestingly, many of the same factors (Figure I) come into play

TABLE II
PER CAPUT INCOME AND FOOD CONSUMPTION

United States, 1955		India (Maharashtra State), 1958	
Yearly Household Disposable Income in U.S. Dollars	Food Consumption Calories/Caput/Day	Yearly Per Caput Expenditure in U.S. Dollars	Food Consumption Calories/Caput/Day
Under 3000	3200	Under 33	1500
3000-5999	3150	33-59	2300
6000 and Over	3250	60 and Over	2900

TABLE III
ESTIMATED AVERAGE SUPPLIES OF NUTRIENTS IN FOODS
APPARENTLY CONSUMED BY CANADIANS
(Per Person Per Day)

Nutrient	1940	1950	1960	Per Capita Recommended Intake*
Calories	2966	3170	3003	2456
Protein (Gm.)	86	95	90	45
Fat (Gm.)	118	132	129	-----
Calcium (Gm.)	0.86	1.04	1.10	0.68
Iron (Mg.)	12.1	13.2	14.7	7.9
Vitamin A (I.U.)	6590	7020	7400	2897
Thiamine (Mg.)	1.42	1.71	1.76	0.74
Riboflavin (Mg.)	1.78	2.10	2.34	1.23
Niacin (Mg.)	15.3	17.1	18.1	7.4
Vitamin C (Mg.)	76	98	88	28

*Values are calculated from the Canadian Dietary Standard, 1963, using the 1960 census data to determine population distribution (by age and sex).

in Canada as in the developing areas of the world. As a result of the interplay of these factors, the nutrition situation, today, in Canada is by no means perfect.

(a) **Food Availability, National Level.** The Nutrition Division of the Department of National Health and Welfare has published statistics concerning the availability of nutrients in Canada^(8, 9). In Table III, the figures for 1940, 1950 and 1960 are compared to the average recommended intake (adjusted for population characteristics) based on the recently revised Canadian Dietary Standard⁽¹⁰⁾. Obviously, adequate amounts of all nutrients shown are available. Two nutrients which are not considered warrant comment. The intake of vitamin D is unknown. This vitamin is present in ordinary foods in very limited amounts and must be obtained from fortified foods or vitamin preparations in the absence of adequate sunlight. Many surveys have suggested that while pre-school children are given a source of this vitamin, many elementary and secondary school children are not. The other nutrient is fluorine. Fluoridation of water supplies has

been endorsed in the Canadian Dietary Standard⁽¹⁰⁾ and the recent report of the Royal Commission on Health Services recommends the immediate fluoridation of all municipal water supplies⁽¹¹⁾. As of 1963, it was estimated that about 20 per cent of the population of Canada had access to water supplies containing 0.7 p.p.m. or more of fluoride (recommended level — 1.0 p.p.m.). It is to be hoped that more municipalities will institute fluoridation programs.

In spite of an adequate supply of food and nutrients at the national level we still have a small number of infants and young children admitted to hospital with rickets due to vitamin D deficiency or scurvy due to vitamin C deficiency. Iron deficiency anemia is still thought to be a problem in young children. A significant minority of children are underweight and apparently underfed. An impressive proportion of Canadians are sufficiently overweight to impair health and efficiency. Food habit surveys repeatedly suggest that food selection at all age levels can be appreciably improved. Thus, adequate nutrient supplies

TABLE IV
INCOME AND FAMILY SIZE AS IT AFFECTS ONE FAMILY

Occupation of Father:	Transport driver, excellent safety record.
Education:	Less than Grade 8.
Income (all sources):	\$300 per month (\$3600 per year).
Debts:	\$500 and mortgage.
Expenses:	Housing (including mortgage, taxes, heat, etc.) \$146 per month; Medical Expenses \$10 per month.
Balance Remaining:	For repayment of debt, clothing, recreation, food, etc., \$144 per month.
Number of Children:	8, ages 2 to 15 years.
Money Available for Food:	Approximately \$14 per person per month, if no money is used for clothing, debt repayment or recreation.

at the national level permit, but do not guarantee, adequate nutrient intakes by individuals.

(b) **Food Availability, Local Level.** A few areas of Canada, because of geographic location and climatic conditions present problems of food transportation and production that affect the availability and/or cost of food at the local level. The Eskimo is an obvious example. The outposts of Newfoundland may also be affected by communication problems although highway and railway construction offers a solution. Certain other islands and areas are subject to seasonal interruption in food supply.

For the majority of Canadians, modern transportation and marketing practices make food available year round. In certain of the "economically depressed" areas, such as are said to exist in parts of the Atlantic provinces, food may be physically available but of restricted economic availability. In these instances improvement of the economic situation is important; equally or more important as an immediate step is the provision of guidance in the wise and economical purchase of foods.

(c) **Food Availability, Family Level.** In Canada, the prime limitation of food to the family is economic. As was shown in Table II, income appears to be a limiting factor only at the very low income level. Such incomes, of course, are most prevalent in the economically depressed areas and in the large cities.

McHenry and Patterson⁽¹²⁾, and many others have shown that low income families can still purchase foods supplying all needed nutrients. They can also provide the other necessities of life. This is possible if they follow a strict and wisely constructed budget. It is also true that many

low income families do not or are not able to do so. In a large city, an inordinately large amount of the time of the nutrition personnel is spent in designing food budgets for low income families.

Family income statistics are misleading if they are not considered in terms of family size. Large families are a real problem in the low income budget. The problem is one of overpopulation on the family scale, and is just as real and as vital as overpopulation in a developing country.

Let us for a moment consider a striking example as shown in Table IV. The family's income of \$3,600 seems reasonable until you realize it must support eight children. The wife cannot work and leave the children; the oldest child will soon have to stop school to increase the income. Unable to rent accommodation, the family has a house, using a compensation payment given for the loss of a finger, as down payment; now they stand to lose the house. The \$500 debt was incurred in connection with the many births; the debt has caused the husband to lose several jobs because of garnishees. Surely this must be considered a problem of overpopulation. If, after housing and medical expenses have been subtracted, *all* of the available money were used for food, the amount would still be only 80 per cent (\$14 per person per month) of that suggested by the Visiting Homemakers Association as the basic food budget⁽¹³⁾.

The effect of family size on nutrient intake is also apparent in Figure III, taken from the 1955 household food consumption survey conducted in the United States⁽¹⁴⁾. It can be seen that as family size increases, fewer families meet the recommended allowances. This is particularly marked in

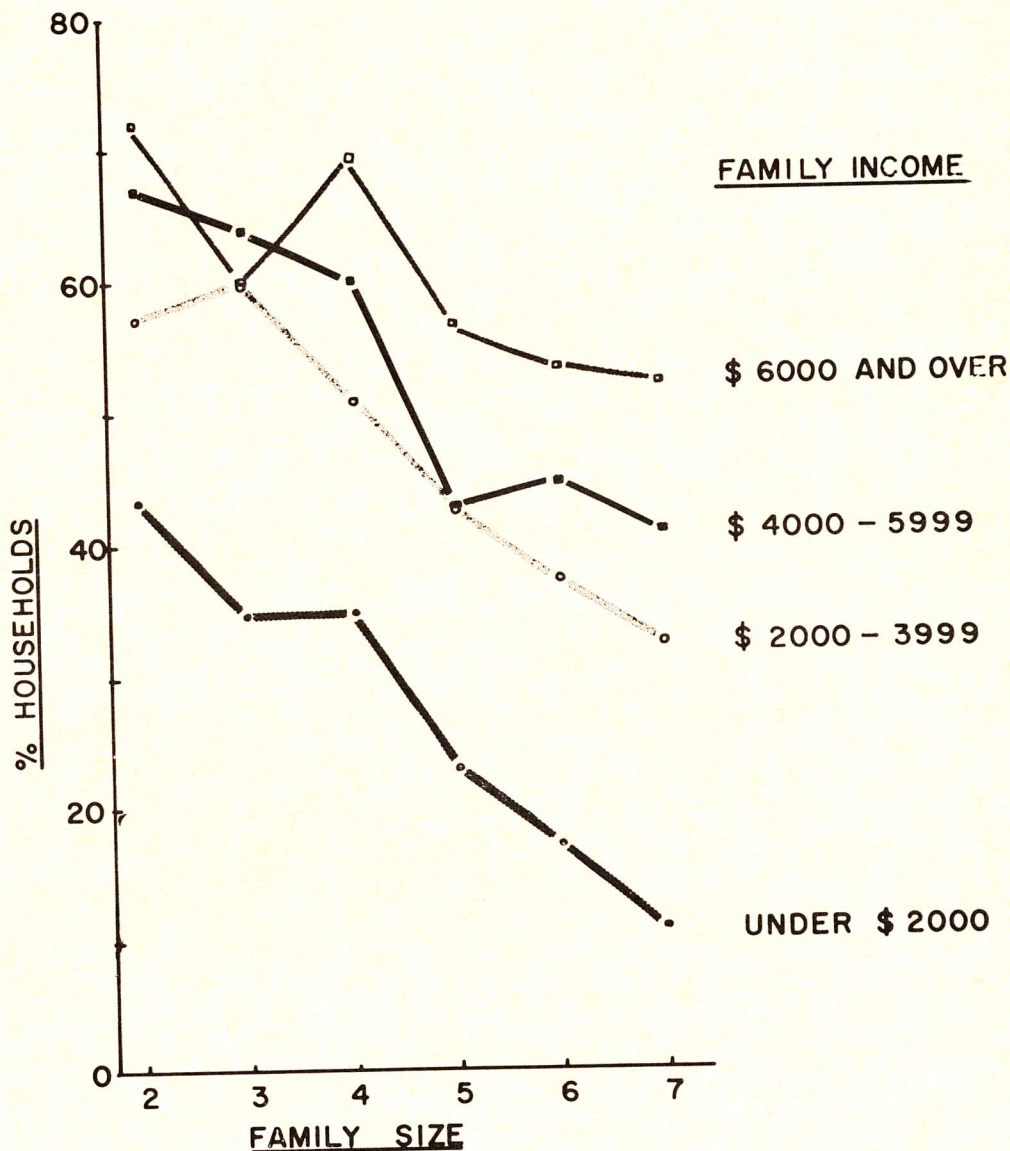


Figure III. EFFECT OF FAMILY SIZE AND INCOME ON THE PERCENTAGE OF HOUSEHOLD MEETING THE RECOMMENDED ALLOWANCES FOR ALL NUTRIENTS (U.S., 1955). The effect of family size is most pronounced at the lower income levels. It was found that upper income families who did not receive all nutrients were usually lacking in only one or two; lower income families usually failed to meet the U.S. Recommended Allowances for several of the nutrients. (Taken from the Household Food Consumption Survey, U.S. Department of Agriculture, Report No. 17, 1963).

the lowest income group. The authors point out "diets of small households which did not meet allowances generally were short in only one or possibly two of the eight nutrients, whereas diets of large households were often short in several of the eight nutrients." Thus, Figure III minimizes rather than exaggerates the effect of family size.

While an improved economy or increased financial allowances to low income families would help it must also be realized that many of these families would have voluntary controlled the size of their families if they had the means to do so. We must revise our archaic attitude toward family planning centers. It is the obligation of public health agencies to provide this service for those members of the community who wish it. The Canadian public to date, has been reluctant to have official agencies enter this field. The voluntary agencies such as the Planned Parenthood groups* in Hamilton, Winnipeg, Vancouver, Ottawa, Montreal, and Toronto and the monumental efforts of Mr. Kauffman in creating the Parent's Information Bureau in Kitchener have helped but it is not enough; the task is too great in terms of personnel and cost for the voluntary agencies. In this connection, it is of more than passing interest to note that the welfare department of the city of Toronto has authorized the payment of the cost of "birth control" pills prescribed by attending physicians. During the past month the Roman Catholic church has appointed a committee to investigate the current methods of birth control. Concern with maternal welfare has prompted the Canadian Medical Association to approach the Federal Government for repeal of the section of the Criminal Code that seems to make the dissemination of birth control devices and information illegal. Let us hope that these are indications of a more liberal approach to the problem in Canada.

Given sufficient income, family size is not a deterrent to adequate nutrition. In

the lower income group, a large family can cripple the development of the family and all its members. The present increase in teen-age marriages, with children arriving before the parents are financially established, suggests serious problems for the future.

(d) **Food Selection, Individual Level.** In Canada, clinical malnutrition in the form of scurvy and rickets, when it occurs, is not found among low income families alone. Studies of eating habits do not suggest that individual food choice always parallels family income. Individual food choice is affected by many factors. The food preference of one member of the family, frequently the father, may be catered to and the foods needed by others may be reduced or neglected. The basic principles of proper food choice may be unknown.

Canadian women have ready access to sound information about good infant feeding practices through their physicians or the well baby clinics operated by government and voluntary agencies. Specially prepared infant foods and cereals, as well as many forms of milk are readily available at reasonable prices. In these circumstances one does not expect to find malnutrition, of the deficiency type at least. However, occasional cases of rickets and of scurvy testify to the need for constant vigilance on the part of the physician and all those engaged in nutrition education⁽¹⁵⁾. Such cases can only be explained on the basis of a failure in the educational process.

It is difficult to obtain information about pre-school children. It is known that the changes in eating habits of these children, which keep pace with the rate of growth and activity, present problems to the mother in terms of acceptability of foods. Further studies in this important age group are needed before we can describe the current Canadian situation.

Many recent studies, both in Canada and the United States have centered on school children and more recently on teen-agers. These studies suggest that there is considerable room for the improvement of food habits. A recent study in Ontario^(16, 17) compared the food intake of teen-agers to that recommended in Canada's Food Guide. Less than half of the teen-agers studied consumed diets containing even 75% of

*The Parents Information Bureau, Kitchener, 410 King Street West; The Hamilton Planned Parenthood Clinic, 80½ James Street North; Family Planning Association of Winnipeg, 232 Home Street; Vancouver Society for Population Planning, 616 Province Building; Ottawa Society on Population Problems, 35 Willard Avenue; "Serena Clinics," Montreal and various French-speaking communities; Planned Parenthood Association, Toronto, 159 Forest Hill Road; Additionally several hospitals now operate clinics in connection with their gynaecological department.

the amounts of food recommended. In a majority of instances, major changes in the diet were not necessary; minor improvements in the quantities of food consumed would have raised the rating considerably. Education should be effective for this group. Surprisingly, in this study, the total amount of food eaten, rather than the pattern of foods eaten, seemed to exert the major effect on nutrient intake. In practical terms this would suggest that when a teen-ager decides to reduce, she eats less food but pays little or no attention to guaranteeing that the food she does eat will supply the needed nutrients. She does not apply the principles of Canada's Food Guide in designing her reducing diet. An obvious reason for concern about teen-age eating habits is the increasing number of teen-age marriages. The nutritional requirements of pregnancy may be superimposed upon those of the growing teen-ager.

Among Canadian adults, the main nutritional problem is obesity. The Canadian Height Weight Survey estimated, on the basis of excessive weight and skinfold thickness, that 13% of males and 23% of females were "obese"⁽¹⁸⁾. If judged on the basis of "ideal weights" outlined by the insurance actuarialists, the proportion would be much higher. This form of malnutrition is associated with the selection of foods in quantities exceeding the body needs. It is preventable by education and curable by guided food restriction. It should not be combatted with the fad diets that appear so frequently in women's magazines.

A new age group is becoming significant on the Canadian scene. In 1961, the population over 65 represented about 8% of the total population as compared to about 5% in 1921. There is little evidence that this older age group is more malnourished than the younger groups but there are reasons for concern. Frequently, this age group suffers from economic problems; housing and cooking facilities may be limited. The problems of living alone and cooking for oneself are obvious, although "golden age" groups relieve part of this problem. There may be more subtle difficulties with certain individuals. The accumulated ailments and insults of a lifetime of living may leave the digestive tract impaired, thus giving inadequate utilization of food or calling for special diets; the use of dentures may re-

strict the choice of foods. Increasing attention will have to be paid to this developing field of geriatrics in Canada and other countries.

In Canada, because of the widespread availability of food, most of the nutritional problems must be considered as the products of inadequate educational efforts. This, of course, omits the problem of the very low income group which is hard pressed to buy sufficient food to satisfy the appetite and nutritional requirements. We can be grateful that clinical malnutrition is rare in Canada; we must not be complacent, lulled by our favorable situation. In this regard, the recommendation of the Glassco Commission on the Civil Service, that the Nutrition Division of the Department of National Health and Welfare, be greatly reduced in staff and activities is very unfortunate. Continuing education is essential.

Family economics in terms of family size and budget have been considered. Food budgeting, to the nutritionist, is a means to an end. The objective is to provide an adequate and satisfying meal as economically as possible. Until the housewife can see that her family will be satisfied, nutrition education is of no value. It is in the follow-up that the education must be provided.

Education can also be conducted through the medium of meal preparation. One must always guard against the wastage of nutrients by careless cooking practices. Good practices, appetizing meals and good nutrition can be taught together.

We return, therefore, to the quotation given earlier in this paper. Knowledge about nutrition "cannot, however, be used where it is needed until the people themselves want to use it."⁽¹⁾

Nutrition is everyone's business. Many things may incite curiosity about nutrition. A TV commercial for a cereal, a gadget salesman at the fair, a vitamin pedlar, or a professor at a meeting such as this can arouse interest. It is the job of the educator to capitalize upon this curiosity and replace misleading information with factual advice. No better advice can be had in Canada than to choose foods in accordance with Canada's Food Guide. But always in employing this guide emphasis must be placed

on its flexibility; we should not expect the many ethnic and cultural groups in Canada to choose the same foods⁽¹⁹⁾. Another point worthy of note is the old saying "practice what you preach." We rely upon school teachers to supply nutrition education for our children. But how well do the teachers eat? In a study of 250 teachers in Scarborough, Ontario, 70% of the teachers ate less than half of the recommended intakes of milk and cereals; their use of fruits and vegetables was better than that of industrial workers in the area, but it could still be improved⁽²⁰⁾.

"Nutrition Today" is one of the most critical subjects that faces the world politician; in Canada, "Nutrition Today" has been relegated to a rather unimportant status because of the low incidence of deficiency diseases. The high incidence of excess nutrition is forgotten. This is unfortunate. With the ever increasing number of foods and food-gimmicks on the market — some with natural foods, some with synthetic color, flavor, and sweeteners, some enriched with many nutrients, some enriched with one vitamin, some not enriched — the homemaker must be confused. Nutrition education is important if we are to continue our good statistical record tomorrow.

We may be on the verge of finding methods for the prevention or at least attenuation of the degenerative diseases of the heart and other organs; hopefully, we may have answers to some of the current questions about diet and heart disease within five to ten years. The discovery of children with metabolic defects such as phenylketonuria which can be controlled by dietary measures has opened a new door of research.

"Nutrition today" soon becomes "nutrition tomorrow."

Summary

Nutritional status is the end product of a series of interrelated factors which influence the availability, selection, and utilization of foods.

In the developing countries, serious problems of gross food supplies for a rapidly increasing population exist. In Canada, there is an adequate supply of all nutrients at the National level. Economic availability

of food at the family level still causes concern in certain areas. It has been stressed that the large family with a low income presents problems of "overpopulation" which are parallel to the national problems in the developing countries. In both situations, family planning is of obvious importance.

Canadian studies do not suggest a high prevalence of deficiency diseases. The occurrence of rickets and scurvy in even a few infants and children emphasizes the need for continuing vigilance. In the Canadian situation, nutrition education is needed to maintain our high standard of health. Food habits should be improved in most age groups; particular attention has been directed to the teen-ager. The growing number of older citizens also warrants further attention.

In the field of preventive medicine, including nutrition, success of the program may be its own worst enemy. The absence of acute malnutrition must not be allowed to lull us into a state of complacency.

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WHO'S WHO

(Continued from page 125)

Director on the C.H.E.A. Board. She is a member of the Manitoba Home Economics Association; has been Treasurer of the Manitoba Home Economics Association, and is now a member of the Executive as a C.H.E.A. Director. She is a member of the Professional Institute of the Public Service of Canada, and has served two periods on its Executive.

She is also a member of the following organizations; Canadian Institute of Food Technology; Canadian Diabetic Association, Winnipeg and District Branch; Winnipeg African Violet Society; Women's Musical Club of Winnipeg; Royal Commonwealth Society, Manitoba Branch; Winnipeg Art Gallery; Consumers Association of Canada; United Empire Loyalists Association of Canada, Winnipeg Branch, in which Association she served on the executive, and then was Vice-President; Balmoral Hall (formerly Rupert's Land and Riverbend Schools) Alumni Association . . . was on the executive; University of Manitoba Alumni Association; Kappa Kappa Gamma Fraternity, Gamma Sigma Chapter; Miss Pugh is a member of All Saints Church, Winnipeg.

Among her hobbies and other interests, Miss Pugh mentions photography, both movies and stills; travel, over many parts of the United States, Canada, and Great Britain; home making with her mother and their dog (a 4-month old miniature Poodle, who has replaced their 15-year-old Dachshund); and painting, when she finds time . . . but NOT modern abstract art!

NEWS FROM CANADA'S CAPITAL

(Continued from page 126)

combined commercial-hospital dietetic internship with the Royal Canadian Air Force. She has been dietitian at Ottawa General and Ottawa Civic Hospitals, and for one year was regional home economist with the Department of Fisheries, Ottawa. In May 1964, she received a Master of Science degree, with a major in Foods and Nutrition from the University of Manitoba. She joined the Consumer Section staff in June.

Thérèse Larue writes French press release and radio scripts. She is a graduate from the University of Ottawa and was employed as dietitian at Saint-Vincent's hospital. She gave courses to both non-professional and student nursing assistants.

Connie McCalla (née Robinson) is doing experimental foods work in the Section. Her home was Nelson, B.C., and she graduated from the University of B.C. in 1962. She completed her dietetic internship at the Vancouver General Hospital then went to Montreal Children's Hospital.

Home Economists

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To be responsible for the Consumer Branch program in one of the above areas, promoting the consumption of sea food.

Applications are invited from university graduates in Home Economics, preferably with specialization in foods and nutrition, and several years of responsible related experience.

For further information and application forms, write *immediately* to the CIVIL SERVICE COMMISSION OF CANADA, OTTAWA 4. Ask for Circular 64-2084.



Charter Members Honored

In her toast to the 26 charter members of C.H.E.A. who attended the 25th Anniversary Convention luncheon in their honor, Miss Edith Rowles said, "You and the others who met at that first convention, had the foresight which has culminated in today's celebration. You dreamed of a

nation-wide Association of Home Economists, but you did not stop with dreams—you contributed your money, your time, your hours of hard work to make the dream come true; the dream which materialized into our professional Association: C.H.E.A. You are the founders; the history makers.

From the Editor:

A new publication entitled *Poultry, How to Buy—How to Cook* has been prepared by the Consumer Section, Canada Department of Agriculture. Copies may be purchased from the Queen's Printer, Ottawa, for 75 cents. A discount of 25 per cent is allowed in lots of 100 or more.

* * *

Our readers will be pleased to hear of the marriage in Saskatoon on August 6, 1964, of Miss Edith Rowles to Prof. George Simpson.

Mrs. Simpson has always been an active member of C.H.E.A. and is one of our past presidents.

The very best wishes of Home Economists across Canada are extended to Prof. and Mrs. Simpson.

* * *

Carolyn McKibbin has joined the Public Relations Department of Kraft Foods as supervisor of consumer publicity.

Miss McKibbin is a native of Winnipeg,

Canada. Upon graduation from the University of Manitoba with a Bachelor of Science degree in Home Economics, she was employed by the Winnipeg Free Press as food editor of that newspaper.

Approximately ten years ago, she joined the J. Walter Thompson Advertising Agency at its Canadian headquarters in Montreal in the Public Relations—Publicity Department. Prior to joining Kraft at its International Headquarters in Chicago on October 1, she was publicity writer and public relations representative for many of the leading food firms in Canada.

Miss McKibbin is a member of the Canadian Home Economics Association and of the Home Economists in Business section of the Association as well as a member of the Canadian Women's Press Club.

* * *

The Journal staff wishes to extend to all its readers Best Wishes for 1965.

PROVINCIAL NEWS

Quebec

The first meeting of 1964 was held on January 23. Our group entertained that evening the graduating classes in home economics of Macdonald College and the Institute of Dietetics and Nutrition, University of Montreal. We had an outstanding guest speaker: Dr. James Robbins Kidd, the executive director of the Overseas Institute of Canada, who spoke on the Canadian Centenary, the overseas aspect of it as well as the Canadian aspect. Everyone greatly enjoyed Dr. Kidd's talk and a lively question period followed.

The February meeting was members' night at which occasion we viewed a most interesting film entitled "Alpine Bread," a lively description of bread making methods still currently in use in the French Alps.

Every member of the association was looking forward to the March meeting to welcome our guest speaker, the Honorable Judy LaMarsh, Q.C., Minister of National Health and Welfare. However, when the day arrived "Judy LaMarsh addressed the Montreal Home Economics Association" (In Absentia) as headlined in the Montreal Star the following day.

An invitation had been extended to several women's associations to participate in this meeting, namely, the Montreal Council of Women and affiliated societies, the Montreal Chapter of the Quebec Dietetic Association, the Consumers' Association of Canada and two Women's Teachers' Associations.

Miss LaMarsh, forced to stay in Ottawa due to a vote to take place in the House of Commons, sent a representative in the person of her executive secretary, Mrs. Gwendolyn Blair, who wonderfully delivered the Minister's message. Health and Welfare of the Canadian Family was the highlight of the speech.

The annual meeting of this association is scheduled to take place at Macdonald College, Ste. Anne de Bellevue, on May 9. A full day's program is planned for members of both the Montreal Home Economics Association and the Quebec Dietetic Association and graduates of the College.—(Mrs.) Louise Rankin.

British Columbia

A beautiful Indian summer brought travelers Joan Berry, Donna McLeod and Susan Cowan home from tours of Europe and back to the classroom with renewed vigor to attack the new Home Ec program geared to vocational outlets being introduced into B.C. schools.

October 24 was Home Coming Weekend at U.B.C. and the class of '54 reunited under the chairmanship of Mrs. Pat Pederson. Some of the alumni were disturbed to see how the new Science buildings are dwarfing the School of Home Economics, or perhaps we might say that Physics is guarding us with a protective wing. The Vancouver and District Home Ec. Association entertained on campus at a coffee party where the members were introduced to this year's scholarship winner . . . Miss Susan Thomson of Richmond. President this year is Roberta Ferris (BHE-UBC 1960). Members also had an opportunity to welcome new members of the Faculty. Dr. Moira Fenney, a native of the Eastern seaboard, having received her B.H.Ec. from Nova Scotia, obtained her Ph.D. from Pennsylvania State University in 1964 and has replaced Dr. Elizabeth Smith in Nutrition at U.B.C. Dr. Smith is at present doing post-doctoral study in Pittsburgh. Miss Eleanor Lund, a graduate of the University of Washington is newly in charge of Education and Teacher Training in H.Ec. The third new member of the Faculty is Miss Merna Borrer, a California girl who studied in Fresno and Iowa State and received her Masters with specialty in Textiles and Clothing from Oregon State. Mrs. Helen Young of Macdonald College and Mrs. Catherine Putnam of Acadia are assisting in the School of Home Economics.

The October meeting of the Vancouver H.E. teachers were delighted by a talk from Miss Peggy Gourley who, in her capacity of Child Welfare worker, had attended the Ottawa Conference on the Family. Her words on the problems in family relations brought to mind a conference held in Hong Kong this summer on "Tensions in Asia." During a discussion on "The Changing Status of Women" the stu-

dents of Japan, Korea and China particularly questioned whether the Western family—a family in which the strength of the family unit has been weakened by the working mother resulting in a rise in juvenile delinquency—is really a family to emulate . . . a point to ponder perhaps.

Mrs. Mary Holt has left the "Sun" to join Mrs. Dorothy Pybus in a Home Economics Consultant business.

As we wish you all a Merry Christmas our hearts are with Miss Kay Wilson who has taken a year's leave of absence from teaching to bask in the sunshine of the South Pacific.

—M. Povah

Prince Edward Island

Charlottetown, the Cradle of Canadian Confederation, in keeping with the Centennial Celebrations of this Province, was host to the Atlantic Home Economics Conference on October 8, 9, 10. The varied program, planned jointly by Miss Theresa Macleod, P.E.I. Department of Agriculture, Mrs. Gordon Kinsman, Truro, N.S., Mrs. R. M. Booker, Fredericton, and Mrs. W. A. Seaman, Sackville, N.B., was met with keen interest. Speakers included: Miss Lorraine Donais, McCall Pattern Corporation, N.Y., Miss Mary Morley, Inspector of Home Economics, Nova Scotia Department of Education, Miss Wendy Abbey, B.S. Archt., Dr. Paul Sims, Director of Food Research Institute, Canadian Department Agriculture, Dr. Frank MacKinnon, Principal of Prince of Wales College, Mrs. John MacLean, Vice-President, Federated Women's Institutes, Miss Elizabeth MacMillan, Dean of Home Economics, Acadia University. Social events included: a welcoming coffee party at the home of Mrs. L. E. Prowse, a luncheon given by the Mayor and City Councillors of the City of Charlottetown, and a farewell tea at the home of Mrs. A. W. Gaudet.

Our Association is very happy to welcome back Mrs. Wendell MacKay, formerly Jean Halliday, University of Manitoba, Home Economics Department.

Miss Sylvia Taylor of the Queen Charlotte High School staff was married in August to Mr. Donald Matheson.

Miss Irene Mountain is teaching at the

Kensington Regional High School this term.

Our Annual Meeting resulted in the following being elected to office: Past President—Mother Frances Loyola, C.S.M.; President—Mrs. G. B. Whiteside; Secretary-Treasurer—Miss Hazel Stearns.

Mother Frances Loyola, C.S.M., has been appointed to the Program Committee to arrange for the Canadian Conference on Aging to be held in 1965, as Chairman for Prince Edward Island. Serving with her on the Local Committee is Mrs. L. E. Prowse.

Mrs. William Reddin attended the Conference on Family Life, sponsored by their Excellencies, the Governor-General and Madame Vanier, in June.

Ontario

Toronto Home Economics Association

To celebrate the 100th anniversary of cheesemaking in Canada, a dinner meeting was held on Wednesday, October 14, at the Skyline Hotel. After an elegant dinner, a cheese and wine sampling session was held.

Guest speaker was Dr. D. M. Irvine, head of the Department of Dairy Science, University of Guelph. Members were interested to learn that there are 40 to 50 different types of specialty cheeses being made now in Canada and that many of them compete very well with the imported types.

As an added treat, Dr. Irvine brought with him a new film, produced in Guelph, describing the specialty cheeses and suggesting new ways to serve them.

Jean Fewster left the Canadian Dairy Foods Service Bureau this past summer to seek her Master of Science degree at the University of Wisconsin. Her major field of study will be Agricultural Journalism. Miss Fewster, a graduate of the University of Saskatchewan; joined the Dairy Farmers of Canada in 1951 when they started a promotion program. As their first home economist she directed the Home Service program and established the Bureau Test Kitchen. Under the name "Marie Fraser," Miss Fewster became well known to press, radio and television people as well as to countless homemakers across Canada. We know her many friends and colleagues will

be glad to hear that she is planning to return to Canada when she finishes her studies.

Home Economics Section— Ontario Educational Association

A successful conference, sponsored by the Ontario Educational Association was held at Carleton University, Ottawa, August 10 to 21. The subject "Family Life" was under discussion. Dr. Glen Hawkes of Iowa State University was the chief speaker.

Professor Ruth Dean retired after 21 years as Head of Home Economics of Ontario College of Education, University of Toronto. Miss Dean has made an exceptional contribution to Home Economics in the province of Ontario.

Miss Helen Finnegan will be Head of Home Economics of Ontario College of Education, University of Toronto.

Miss Ellen Downie of Midland Avenue Secondary School, Scarborough has been appointed Inspector of Home Economics for Ontario to assist Miss Anne Lawson and Miss Sheila Ryan.

Miss Marion Hanley Birkinshaw, teaching in Sault Ste-Marie received the Laura L. Ockley scholarship as the candidate in the 1963 graduating class.

Miss Mary Griesbach won the Anne W. Cameron Memorial Award and Miss Jane Heatley won the Zonta Bursary - Nellie L. Pattinson Award for superior standing as Home Economics teachers. Both completed requirements at the Ontario College of Education, University of Toronto.

University of Toronto, Household Science Alumnae Association

In June, the Alumnae entertained the graduating class at a buffet luncheon. The fifty-year graduates were honoured guests. Mrs. Helen Scott Allen of the class of 1914 was present and spoke briefly to the new graduates.

Members of the Alumnae have been assisting the Social Planning Council of Toronto in the planning of a family budget to be used by welfare organizations in helping families to maintain themselves at a level sufficient to ensure health, self-respect and well-being. This voluntary effort has been challenging and very rewarding to the many busy young housewives and profes-

sional graduates who served on the committees studying all items in the family budget.

Mrs. Paul Baker (Grace Armstrong) has been elected as a representative from University College to the Senate of the University of Toronto.

Miss Margaret Ketchen succeeds Mrs. Clark Lock (Norm Henry) as the representative from the Alumnae to the Senate of the University of Toronto, for the next quadrennium.

Mrs. Patricia Coleman, Mrs. Barbara Fellows and Mrs. Patricia Green have resigned from the Faculty of Food Science. Mrs. Jean Butterfield retired in June as assistant professor, but will be on staff as a special lecturer in Food Chemistry. Dr. J. J. Moran, formerly the Director of Research at Toronto Carpet Company and Dr. J. R. Moreau, formerly senior Research Scientist with Canada Packers have joined the staff.

Hamilton Home Economics Association

Last April, Miss Margo Oliver of Montreal spoke on her work as food editor of Week-End Magazine. The meeting was held at the Nursing Assistants Centre. She outlined some of the problems involved in preparing a weekly food column for over two million readers both English and French. She has recently acquired a new test kitchen in Week-End's building where she also has her office.

At the May meeting, the members took a bus tour of Jordan wineries in Jordan, Ont. A courteous reception as well as samples was given to all.

A pot luck picnic brought the group together in June at the home of Mrs. Ernest Weeks of Waterdown. Dr. Barbara McLaren, University of Toronto and Dr. Margaret McCready, University of Guelph, were given honorary membership in the H.H.-E.A. at this meeting. New officers were installed.

The opening coffee party in September was held as usual at the Brow Nurses Residence, Hamilton Health Association. New and prospective members were introduced by the President, Miss Margaret Price. Miss Alice Dales gave a report of the 55th Annual American Home Economics Annual meeting at Detroit in June.

At the October meeting, a most interesting illustrated talk was given by Dr. Paul Sims of the Food Research Institute, Canada Department of Agriculture. He spoke on foods of the future and work of the newly formed Food Research Institute. At this meeting Dr. Laura Pepper who retired in June after 33 years with the Canada Department of Agriculture was honored with a life membership in the Ottawa Association. Mrs. Marjorie Jefferson is president this year.

COLLEGE CLUBS

Acadia University

The Acadia Home Economics Club started off its activities this year with a general meeting followed by the serving of coffee and doughnuts to both members and faculty. Against this informal background, it was possible for the new and the old members to relax and get acquainted. Each member was given a name tag made of brown construction paper. This eliminated the formality of introductions. It was discovered that the membership of the club had increased 100 per cent as more Freshettes than ever before have come to Acadia for home economics.

Each year the club is divided into four or five groups, and each group sponsors an "activity." The activities this year are on such themes as "Home Economics Education," Dietetic Internships" and "Home Economics Research." After the guest speaker or speakers, there is a lunch or a buffet supper. Thus the club gains experience in organizing, executing and participating in social functions of various natures.

The Nova Scotia Home Economics Association held a conference in Charlottetown on October 8 to 10. We were pleased that our president, Linda Cantalope, and a member, Carla McKinnon, were able to go. They plan to give a report at our next meeting on their activities at that meeting in Charlottetown. We know from their enthusiasm after they returned that their experiences will give us an even more vivid interest in home economics.—*Sharon Lawrence.*

In Memoriam

MRS. WILLIAM ANDREW AMOS

Mrs. William Andrew Amos (nee Ethel M. Eadie, formerly Mrs. Norman Hutchison), a pioneer in the field of home economics, died Friday, August 21st, 1964, at the age of 84. She was a charter member of C.H.E.A. and received an honorary life membership in our Association at the 1952 Convention in Saskatoon.



A graduate of the Lillian Massey School of Household Science, she organized the Department of Household Science at the Ladies College at Mount Allison University and later joined the staff of the Lillian Massey School of Household Science which subsequently became the Household Science Department of the University of Toronto.

In 1915 Miss Eadie was appointed head of the Household Science Department at Manitoba Agricultural College which was later incorporated into the University of Manitoba. Miss Eadie left this position on her marriage in 1918 but continued her interest in nutrition related to the home, the community and the teaching profession.



PROVINCE OF ALBERTA

Employment Opportunities

HOME ECONOMIST I, an excellent opportunity for a graduate Home Economist to assist in the general supervision of the 4-H girls' programs throughout Alberta. Some public speaking experience with rural or other youth groups desirable. Generous fringe benefits and travelling allowances. Department of Agriculture, Edmonton. Starting salary up to \$435. Competition 64-524X.

For details and application forms apply to the Personnel Administration Office, Room D 203, Terrace Building, Edmonton, Alberta.

Abstracts of Current Literature

Submitted by FACULTY OF SCIENCE, Mount Allison University

A study of vitamin C and D intake of infants in the metropolitan Vancouver area.

G. A. MOTT, R. H. ROSS and D. J. SMITH;
1964; *Canadian Journal of Public Health*;
55:370.

The authors describe a study they had carried out on 854 young infants from four out of eight Child Health Centres in Greater Vancouver who were drawn from all walks of life. Their purpose was to ascertain the source and adequacy of intake of Vitamins C and D and the need for supplements of these vitamins. The authors' concern over this problem arose from the evidence that people on this continent had the highest consumption of vitamins from synthetic sources of anywhere else in the world; and with their high standard of living it seemed probable that the vitamin intake from synthetic sources was not only not needed but that some people were consuming an excessive amount, especially of Vitamin D. They wanted to be certain also that children had an adequate vitamin intake.

In this study an insufficient intake was defined as less than 30 mgms. of Vitamin C and 400 I.U. of Vitamin D per day.

Information re the vitamin intake of the children was obtained from the mothers by public health nurses.

Results

1. Re Vitamin D

6 per cent were getting less than 400 I.U.;
1 per cent were in excess of 2,000 I.U.;
69 per cent were receiving over 400 I.U. from the diet. 83 per cent received a supplementary preparation in addition to the adequate diet. The main dietary source was milk.

2. Re Vitamin C

15 per cent were receiving less than 30 mgms. while 5 per cent of these were receiving practically none; 56 per cent received more than 30 mgms. from the diet. The main dietary sources were orange, tomato and vitaminized apple juice.

The authors suggest from this study that, for the most part, the following groups only require vitamin supplements:

- "(1) Infants fed on breast milk or cow's milk without Vitamin D enrichment require a Vitamin D supplement.
- "(2) Infants whose milk intake is low require a Vitamin D supplement.

"(3) Infants allergic to orange juice or vitaminized apple juice, or those who consistently refuse these, require a Vitamin C supplement."

I. The frequency of meals, its relation to overweight, hypercholesterolemia, and decreased glucose-tolerance.

P. FABRY, Z. HEJL, J. FODOR, T. BRAUN, KAMILA ZVOLANKOVA; 1964; *The Lancet*, 7360, Vol. II, 614-615.

II. Treatment of refractory obesity with a diet of two meals per day.

D. A. SEATON, L. J. P. DUNCAN; 1964; *The Lancet*, 7360, Vol. II, 612-614.

III. When to eat.

AN EDITORIAL; 1964; *The Lancet*, 7360, Vol. II, 629-630.

I. Dr. Fabry and colleagues, Prague, reported on a survey made on 397 men, aged 60-64, selected at random, and grouped according to food intake, in which body weight and height, skinfold thickness, serum cholesterol level and glucose-tolerance were related to the frequency of food intake. Results showed that among those who took three meals a day or less, excessive weight, increased serum cholesterol and diminished glucose-tolerance were significantly more common than among those who took five or more meals per day; while those who consumed three to four meals with or without additional snacks showed intermediate values.

II. In contrast, a report by Drs. Seaton and Duncan, Edinburgh, on a 12-week trial study on 33 out-patients with refractory obesity, using two 500 calorie meals per day, showed that the patients who adhered strictly to the regimen had an 11.0 mean weight loss, and experienced no real difficulty with hunger. The report suggested that the patients were more likely to have their appetites satisfied; and the division of calories into two meals per day reduced the frequency of exposure to food, and thus the temptation to over-eat.

III. The Editorial suggested that a physiological explanation of the results in Report I might be that a large meal stretches the metabolic mechanisms of disposal, and gives rise to an excess of lipids in the

blood. Repeated excess of lipids may damage the lipid control mechanism of the blood.

In regard to Report II, the Editorial suggests that the clinician has to find out much more about the eating habits of his patients in order to find the most suitable regimen. Furthermore, there is a real research problem in the quantitative study of metabolic changes, following meals of varying energy content, and the relation of such changes, if any, to the appetite regulating mechanisms.

Laminates—their status today.

H. S. HOWARD; *Modern Textiles*; 45:5.

This paper gives relevant information regarding laminates; methods of manufacture, markets, new end-uses, improvements, finishes, and defects.

A brief review of urethane from laminates provides an introduction, from the first years of poor results, to the virtual abandonment to its present remarkable growth due to responsible procedures and quality control standards.

Figures are given on growth of types, thicknesses, double and single types. New uses are discussed for such things as shoes, support garments, furniture fabrics, auto upholstery, table cloths, scatter rugs and other miscellaneous uses.

New finishes are discussed which give sculptured effects, waffle or patterned surfaces; smooth faced foams are being used as a base for other surface treatments in design.

Methods of bonding are cited and types of foam improvements that seem desirable. Fabric to fabric bonding shows increasing use.

A discussion of the relative merits of adhesive and heat laminating gives the advantages and disadvantages of the two methods.

Reports of defects in laminates are given, especially from dry cleaners. Deterioration of foam, swelling when wet, splitting of laminated materials are all problems.

The desirability of continuing, and increasing quality control standards and checking are stressed.

Family goals in a democratic society.

E. B. LUCKEY; 1964; *Journal of Marriage and the Family*; 26:271

Professor Luckey compares the methods of character education employed by the Communists and those customs and practices prevalent in the United States which are related to family life. She points out the difficulties

inherent in making any accurate estimate of these practices because of the very democratic nature of their origin.

The author quotes David Mace, sociologist, who, with his wife, made a study of the Soviet family during a several weeks' stay in Russia in 1961. The picture he gives is a favorable one, embodying much that is identical with the American ideal of family life — close companionship between parents and children, and children who are well-behaved, friendly but not aggressive, clean, co-operative and bright. Mace intimates that the Soviet family, on the average, comes closer to this ideal than does the average American family.

The Soviet state has conceived, planned and is carrying out a system of family life education that involves close supervision of teachers, parents and children. It is contrasted with the inconsistency, the parental disagreements over disciplinary problems, the rather lax moral atmosphere which prevail in all too many American homes and which have caused such widespread concern about family life on this continent.

The American emphasis is on freedom of the individual. The Soviet emphasis is on co-operation of the group and this is "internalized" in the Soviet child from earliest childhood.

There is much to admire in both systems and in results achieved in spite of failures on both sides. Prof. Luckey quite evidently feels that, with all its shortcomings, the democratic system is far superior to that which imposes through state directed disciplines and supervision and questioning obedience, where the child always measures himself against the group and its approval or disapproval. The danger in the American way, she says, is that "We may be led by our very freedom to think that we are free from responsibility." The establishments of a human fellowship which will cut across all lines of political difference, social class, race, sex, religion" . . . is the goal which democracy should seek for its family life.

Fibers of the future.

J. B. GOLDBERG; 1964; *American Dyestuff Reporter*; 53:16.

The author reviews the available textile fibers, then discusses more fully the probable aims of the research chemist and the possible results.

A brief survey of the earliest research work is given with its aim of trying to imitate natural fibers. The introduction of true synthetics with their new characteristics which made them attractive and acceptable to the consumer re-

quired little in the way of expenditure for advertising and promotion by the producer. This day is fast disappearing and new synthetics now find competition and promotion costs prohibitive. This is likely to prevent the discovery of any really new synthetic in the next few years.

According to the author, the future seems to hold the possibility of many innovations involving chemical modification of existing fibers if this can be done without altering the basic material. There is a possibility of new yarn types through spinning processes; surface characteristics may have more novelty effects; new dimensions in denier will make possible yarns having better hand and draping quality; altered dyeing properties have been given to nylon and may be extended to rayons. There may be an attempt to create new properties by chemical manipulation in the research laboratory, such as hydrophobic fibers made hydrophilic, and water repellency acquired by porous materials.

There are still some desirable qualities to strive for in man-made textiles—yarns that feel cool in summer and warm in winter, and water absorbency such as is found in silk and wool are goals for the chemist.

Book Reviews

Household Equipment Principles, Van Zante, Helen, 1964. Prentice-Hall of Canada Ltd., Toronto, Ontario (Canadian Distributors). Price \$12.95. 523 pages. Recommended for University and Teacher Reference.

When reviewing the book on "Household Equipment Principles," by Helen Van Zante, the reader felt that the material dealing with household equipment was excellent and that the author has done a considerable amount of research in compiling the details. Much new material not previously included in such a text broadened the field and added interest and knowledge.

The information sources and directories, complete with addresses should be useful for student assignments and assisting teachers in accumulating libraries in the equipment field.

It was felt by the reader that some areas of the book could have been better organized, for example, the chapter on Water in the Home. The laboratory experiments and projects were usually quite good although practicability might be suggested sometimes.

The reader feels the section on washing of woolen materials is misleading. Research techniques have proved that agitation is the prime cause of felting and shrinkage. Techniques for laundry could be lengthened and strengthened. (Acetate is not rayon, see FTC Textile Label Rules; Rule 7).

The subject of Household Insect Pests is a big one and it seemed that more space should be assigned to the topic or it should be completely deleted.

The book is a good one with a new approach but the reviewer would like to see some areas strengthened.

—Mary E. Singer,
University of Guelph.

Tailoring for Women, Step by Step, by Dorothy Donielson and June Pond, 1963. Hallen Publishing Company, 1962, Kirby Way, San Jose 242, California 95124. Price \$3.95, 91 pages. Lesson plans \$1.00 per set.

The authors' stated objectives are to develop understanding, recognition and appreciation of custom techniques in tailoring; to increase the understanding of the use and proper handling of fabrics in tailoring and to recognize limiting factors; to learn construction techniques and acquire necessary skills to produce a custom tailored suit or coat. To meet these objectives they have strived to present their material in a step-by-step sequence, beginning with the selection of equipment and supplies and progressing to the final step of applying the jacket or coat lining. The last four chapters deal with style variations of collars and sleeves which require a modification of techniques presented in earlier chapters.

The reviewer feels that the step-by-step sequence is not always logical however, each teacher should find it easy to change the order of procedures to best meet her needs in presenting the principles of tailoring to her class. The set of accompanying lesson plans should be valuable to a novice teacher in planning her first tailoring course; as the authors stress, these plans are flexible.

The book is clearly and concisely written with excellent illustrations to clarify the techniques.

A good reference text.

Annette Ostapovitch,
University of Manitoba

Past Presidents Attend 1964 Convention



The past-presidents who attended the 25th Anniversary Convention were honored at the final banquet. A special toast was proposed by Miss Charlotte Black.

Rear—from left to right—Edith Rowles, Margaret McCready, Doris S. Runciman, Jessie B. Brodie, Marjorie Kennish.

Front—Gertrude Gerlach, Kathleen M. Watson, Mabel Patrick.

Art and Design in Home Living by Frances Melanie Obst, Department of Home Economics, University of California, published by Macmillan Co., New York, 1963; 332 pages, list price \$8.80.

This is an excellent teacher reference, in areas of home planning and furnishing. It consists of five parts:

Part I, Design Analysis introduces aesthetic values of good design, basic art principles and color information.

Part II, Planning the House discusses size, shape, economic values and furnishings to suit family needs.

Part III, Background for Living gives basic information for selection of backgrounds, window and floor treatments.

The thesis of Part IV is that one must decide how "Furnishing Expression" can best be determined. Traditional periods and modern trends are discussed. Purchasing

problems related to surface attractiveness, good taste, durability, comfort, cost, convenience and maintenance are discussed in a realistic fashion.

Part V, Decorative Additions gives advice on choice of pictures, accessories, table settings and flower arrangements.

The author is convinced that a good home environment arms adults against the pressures of living, and secures to children a happy place to live.

Physical features of the book are excellent. The pages are heavy, glossy type 8" x 11", the print is clear and not too small, and the book is profusely illustrated with well selected examples, mostly black and white.

The style of writing is concise, clear and interesting. Examples: "The aesthetic goals of any person creating a background for

living should be three: first, to recognize beauty; second, to see beauty in familiar things; and third, to learn how and where to put art to use."

A copy of this book should prove to be a very useful addition to the high school home economics or art library. Reviewed by H. Janzen, Manitoba Department of Education.

Cookbook for Diabetics. Published by Burns and McEachern, Toronto 1963. Written by a Committee of Dietitians from the Ontario Dietetic Association. Price \$2.00.

The Cookbook for Diabetics contains a collection of recipes which will assist the diabetic in planning and preparing meals.

The section on liquid and soft diets will be of particular interest to the diabetic and his family. The chapter contains exchange values for foods which may be substituted for the regular diet when the individual's tolerance for food is lowered.

The chapter on food preservation includes some recipes for pickles and sugarless jams. Although the chapter is entitled, "Canning, Freezing and Pickling," instructions for freezing do not appear. In view of the fact that a large number of families use freezers, some freezing methods and uses of frozen foods would be helpful.

The reviewer feels that the authors of the cookbook failed to recognize that minimal amounts of time are spent in meal preparation in the modern home. For example, do the number of persons making cream soup from the basic ingredients justify the amount of space allotted in the book to the preparation of this item? Inclusion of ways to incorporate prepared foods into the diabetic diet would be welcomed by the modern homemaker. The use of fruit for dessert is quick, easy, nutritious and attractive. Some suggestions for the varied use of fruits as a dessert would be welcomed. The addition of some advice about the selection of food in restaurants and at social functions would also add to the value of the book.

A list of references would be useful. The reviewer noted that the services of the Home Economics Section, Canada Department of Fisheries and the Consumer Section, Production and Marketing Branch, Canada Department of Agriculture were acknowl-

edged. However, the directions for canning do not appear in the Department publication, "Home Canning of Fruits and Vegetables."

Generally, the recipes are "family sized," which makes them useful. However, the inclusion of a one serving recipe for stuffed fowl does not seem to be very practical.

The reviewer recommends that local Diabetic Associations purchase the book. The publication of such a book represents an important service to diabetics, and we congratulate the authors. We hope that the book will be revised and expanded to include the use of "convenience" foods. Reviewed by Vivian M. Bruce, University of Manitoba.

NEWS FROM A.H.E.A.

A national committee of the American Home Economics Association has endorsed eight training programs of the U.S. Department of Health, Education and Welfare which will create new services to meet needs of homes and communities throughout the nation, "thereby promoting better family living."

Meeting in Washington, D.C. (December 1), the Association's Committee on the Commission on the Status of Women described as "vital and forward-looking" the concept of the new home-related services labeled "family dinner service specialist," "companion to an elderly person," "homemaker's assistant," and "clothing maintenance specialist" which are four of eight sub-professional occupations to be taught under technical and vocational education auspices throughout the United States. The job training is primarily geared to adults who may or may not have received a high school education.

Community-focused occupations delineated in the program are "management aide in low-rent public housing projects," "visiting homemaker," "hotel and motel house-keeping aide," and "supervised food service worker." All of these occupations require sub-professional training which is set forth in a series of eight manuals issued by the Office of Education. Individual copies may be ordered from the Government Printing Office at 20 cents per copy.

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*American Heart Association: "Planning Fat-Controlled Meals for 1200 and 1800 Calories", N.Y.C., 1962.

